

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-060648

(43)Date of publication of application : 06.03.2001

(51)Int.Cl.

H01L 23/50
C25D 7/00
H01L 23/12
// C23F 1/00

(21)Application number : 11-235126

(71)Applicant : DAINIPPON PRINTING CO LTD

(22)Date of filing : 23.08.1999

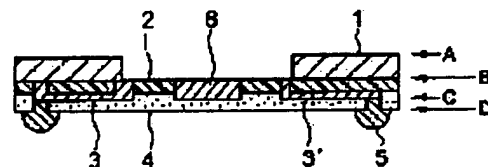
(72)Inventor : SHIBAZAKI SATOSHI
UMEDA KAZUO

(54) LEAD FRAME, MANUFACTURE THEREOF AND SEMICONDUCTOR DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a lead frame which can be manufactured through simplified processes.

SOLUTION: A lead frame is equipped with a conductive board 1, leads 3 and 3' which are two-dimensionally formed by plating on the conductive board 1, an insulating film 4 which is formed on the surface of the board 1 where the leads 3 and 3' are provided, openings provided to the insulating film 4 corresponding to the leads 3 and 3' so as to make them exposed, external terminals 5 each provided to the openings, and a die pad 6 which is obtained by selectively etching the conductive board 1 so as to support a semiconductor element, where the conductive board 1 functioning as a feeder layer when plating is carried out is made to serve as a reinforcing plate. Therefore, a stiffener serving as a reinforcing plate is not required to be bonded through a separate process, and a stiffener and a ground layer can be formed through the same process with which a wiring layer and a grounding layer are formed.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the
examiner's decision of rejection or application
converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2001-060648

(43)Date of publication of application : 06.03.2001

(51)Int.Cl.

H01L 23/50
C25D 7/00
H01L 23/12
// C23F 1/00

(21)Application number : 11-235126

(71)Applicant : DAINIPPON PRINTING CO LTD

(22)Date of filing : 23.08.1999

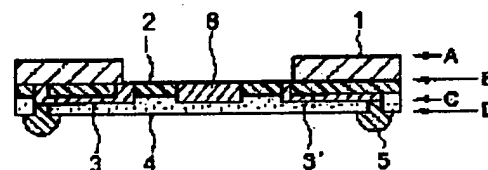
(72)Inventor : SHIBAZAKI SATOSHI
UMEDA KAZUO

(54) LEAD FRAME, MANUFACTURE THEREOF AND SEMICONDUCTOR DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a lead frame which can be manufactured through simplified processes.

SOLUTION: A lead frame is equipped with a conductive board 1, leads 3 and 3' which are two-dimensionally formed by plating on the conductive board 1, an insulating film 4 which is formed on the surface of the board 1 where the leads 3 and 3' are provided, openings provided to the insulating film 4 corresponding to the leads 3 and 3' so as to make them exposed, external terminals 5 each provided to the openings, and a die pad 6 which is obtained by selectively etching the conductive board 1 so as to support a semiconductor element, where the conductive board 1 functioning as a feeder layer when plating is carried out is made to serve as a reinforcing plate. Therefore, a stiffener serving as a reinforcing plate is not required to be bonded through a separate process, and a stiffener and a ground layer can be formed through the same process with which a wiring layer and a grounding layer are formed.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office